

(vs. all OCs) had lower activity impairment and fewer provider visits, lower indirect costs (normal weight: €7,974; overweight: €7,825; OC I: €8,465; OC II: €9,394; OC III: €10,437), and lower total direct costs (normal weight: €516; overweight: €553; OC I: €583; OC II: €605; OC III: €717), all  $p < 0.05$ . **CONCLUSIONS:** Increased BMI is associated with higher direct and indirect costs and worse health utilities. The findings highlight the impact of obesity on health outcomes.

#### PSY49

##### CROSS-COUNTRY COMPARISON OF MEDICAL RESOURCE UTILISATION IN PATIENTS WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE IN EUROPE

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**OBJECTIVES:** Autosomal dominant polycystic kidney disease (ADPKD) is the most common genetic kidney disease. Currently there is little published information on medical resource utilisation (MRU) in European ADPKD patients. This study aimed to estimate the health care resource use of ADPKD patients across six European countries. **METHODS:** A retrospective review of medical charts was conducted via an online physician survey in France, Germany, Italy, Spain, Sweden and the United Kingdom (UK). A total of 353 physicians were recruited to review MRU over the previous 24 month period from the records of 1,055 patients, with each clinician selecting the last three patients representing three different chronic kidney disease stages. Data collected included patient characteristics and MRU such as tests, visits, hospitalisations and medications. **RESULTS:** The proportion of patients who had a kidney ultrasound during the 24 months study period varied from 20.0% in Sweden to 68.0% in Germany. In all countries, except Germany (66.0%), at least 90% of patients had one or more contact with a specialist. Annualised specialist visits varied from 2.7 (SD 7.9) in Germany to 6.0 (SD 10.7) in Sweden. Germany had the largest proportion of patients with hospitalisations related to ADPKD (25.7%) whereas Sweden had the lowest (13.3%). Hospital length of stay was longest in Spain (mean, 8.5 days (SD 6.2)) and shortest in the UK (mean, 4.7 days (SD 3.8)). In terms of medication use, 32.7% of German patients were prescribed loop diuretics whereas this proportion was 9.0% in the UK. The UK had the highest rate of opioid use for renal pain overall (8.7%) and among patients on dialysis (27.3%). **CONCLUSIONS:** This is the first study to provide comparative evidence on MRU in European patients with ADPKD. Results highlight some country-specific differences in treatment patterns, including rates of hospitalisation, frequency of specialist visits and medication use.

#### PSY50

##### AN EVALUATION OF MEDICAL RESOURCE UTILISATION IN PATIENTS WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE IN EUROPE

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**OBJECTIVES:** Autosomal dominant polycystic kidney disease (ADPKD) is the most common type of polycystic kidney disease (PKD) and the fourth leading cause of end-stage renal disease. Currently, there is no published information on medical resource utilisation (MRU) in patients with ADPKD in Europe. This study aimed to better understand MRU associated with ADPKD by disease stage in six European countries (Germany, France, the United Kingdom, Italy, Spain and Sweden). **METHODS:** This study was a retrospective review of medical charts collected via an online physician survey. Participating physicians abstracted data for the last three eligible ADPKD patients treated in their practice, each within a different Chronic Kidney Disease (CKD) stage. Data collected over the past 2 years included socio-demographics, clinical characteristics and MRU, such as diagnostic tests, specialist visits, dialysis, emergency department visits, inpatient admissions and medications. **RESULTS:** A total of 1,055 ADPKD patients were enrolled. The mean (SD) age of the sample was 50.4 (14.4) years, 53.6% were male, with 39.4% employed full time. Only 40% of patients had a known PKD genotype, of which 83% had PKD-1 and 17% had PKD-2. Almost all patients (99.1%) experienced at least 1 ADPKD-related complication, most commonly hypertension (75.4%). On average (SD), patients had 4.4 (9.3) annual specialist visits. Approximately 19.7% of patients experienced at least 1 hospitalisation over the 2 year study period with a mean (SD) length of stay of 7.0 (8.5) days. Patients in more advanced disease stages reported higher mean (SD) annual specialist visits and more disease-related hospitalisations, 1.5 (1.1) and 9.2% in CKD Stage 1 compared to 10.0 (17.2) and 32.4% in Dialysis, respectively. **CONCLUSIONS:** This is the first study to provide evidence on MRU among patients with ADPKD in Europe. Results demonstrate that ADPKD patients require substantial MRU, which accumulate with disease progression.

#### PSY51

##### COST-CONSEQUENCES ANALYSIS OF THE LONG-TERM PROPHYLAXIS IN A TYPE 1 VON WILLEBRAND DISEASE PATIENT WITH RECURRENT BLEEDINGS IN ITALY

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**OBJECTIVES:** Von Willebrand Disease (VWD) is the most common inherited bleeding disorder, caused by a deficiency or abnormality of the Von Willebrand factor (VWF). Long-term prophylaxis (LTP) with Factor VIII-containing VWF product (FVIII/VWF) is used for patients with severe VWD. However, FVIII/VWF is not enough effective in some cases. Furthermore repeated infusions of FVIII/VWF may increase the risk of thromboembolic events. The objective of the analysis was to assess the economic impact of VWF concentrate almost devoid of FVIII as an alternative to FVIII/VWF for

a patient on LTP with recurrent bleedings. **METHODS:** A cost-consequences analysis was adopted to assess the economic impact from the NHS and Society perspectives. The cost analysis was based on one patient case (type 1 VWD, recurrent gum bleedings), treated with FVIII/VWF and then with VWF concentrate almost devoid of FVIII. The costs included direct costs (drug acquisition, hospital admissions, outpatient visits, red blood cells units) and indirect costs (working days lost). Data were gathered from a questionnaire (Hemophilia Reference Center of Catania). The health care costs were calculated by DRG analysis that assessed DRG refund value for day hospital and standard hospitalization. The indirect costs were calculated on the basis of the annual income average. **RESULTS:** The analysis showed a reduction of the number of bleedings when treating with VWF concentrate almost devoid of FVIII (30 vs 0), minimizing the cost per bleeding episodes (€87,957 vs €0), hospitalizations (€3,252 vs 0), monitoring visits (€331 vs €165) and the number of working days lost (26 vs 2). The annual health care costs and indirect costs avoided were €49,684 and €3,734 respectively. **CONCLUSIONS:** The replacement therapy with VWF concentrate almost devoid of FVIII decreased the consumption of hospital resources and reduced the number of working days lost per bleedings together with the discomfort related to bleedings.

#### PSY52

##### COST PER RESPONSE ANALYSIS FOR THROMBOPOIETIN RECEPTOR AGONISTS (TPO-RAS), IN THE TREATMENT OF ADULT CHRONIC IMMUNE THROMBOCYTOPENIA (ITP) IN MEXICO

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**OBJECTIVES:** TPO-RAs, represent an evidence-based treatment option in the public setting for adult patients with chronic ITP in Mexico. TPO-RAs have not been directly compared in head-to-head randomized controlled trials (RCTs); however an indirect comparison was undertaken using Bayesian metaregression: the overall platelet response was significantly higher in patients receiving Romiplostim than in those receiving Eltrombopag, estimating an Odds ratio (OR) of eltrombopag vs romiplostim as 0.15 (95% CI: 0.02, 0.84). The objective of this study is to compare the cost per response of TPO-RAs in chronic adult ITP in Mexico. **METHODS:** A cost per response analysis was developed. Dose was derived from RCTs and Summary of Product Characteristics. Median dose for romiplostim was 2.5 mcg/kg/week and average dose for eltrombopag was 55 mg/day (21.5% of patients received 25mg; 41% 75mg; and remaining 37.5% 50mg). Costs for romiplostim were based on vials used, considering a representative Mexican patient (65kg); for eltrombopag, it was based on milligrams needed. Cost assessment included cost of medication, cost of administration and in case of eltrombopag, cost of liver monitoring, expressed in Mexican pesos. Crude Overall Response Rate (ORR) for romiplostim was 83%. Placebo adjusted ORR for eltrombopag was 42% calculated by applying the OR estimated from the Bayesian indirect comparison performed by the NICE Evidence Review Group. **RESULTS:** Romiplostim generates a cost per overall platelet response of \$219,690.80, while eltrombopag yields \$374,137.72. **CONCLUSIONS:** Within the TPO-RAs, romiplostim generates a lower cost per response than eltrombopag, in adult patients with chronic ITP in Mexico.

#### PSY53

##### COST-EFFECTIVENESS ANALYSIS OF BELIMUMAB IN THE TREATMENT OF ADULT SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) PATIENTS WITH POSITIVE BIOMARKERS IN SPAIN

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**OBJECTIVES:** Belimumab is a novel biological treatment specifically developed for the treatment of active, autoantibody positive SLE patients. The purpose of this study is to estimate the cost-effectiveness of belimumab for SLE patients from the Spanish societal perspective. **METHODS:** A UK cost-effectiveness microsimulation model was adapted to the Spanish setting. The analysis compared standard of care (SoC) vs. belimumab plus SoC with 2 years maximum treatment duration and a life-time horizon. Disease activity reduction seen with belimumab in the BLISS-52 and BLISS-76 trials, was extrapolated using data from the US Johns Hopkins Lupus Cohort to predict impact on long-term organ damage and mortality. Utility values and unit direct costs (treatment, administration, patient's follow-up and organ damage costs) were obtained from UK and Spain published data, respectively. Indirect costs were calculated using the Human Capital Approach method. A discount rate of 3% was applied to costs and outcomes. Results were expressed as €2014. Deterministic and probabilistic sensitivity analyses (PSA) were conducted to determine the robustness of the results. An additional analysis was conducted to compare societal and Spanish National Health System (NHS) perspectives. **RESULTS:** The cost per life year gained (ICER) and cost per QALY (ICUR) for Belimumab were €16,647 and €23,158 respectively. In 68% of scenarios plotted in the PSA, belimumab was a cost-effective alternative considering a €30,000/QALY threshold. From NHS perspective (indirect costs excluded), ICER and ICUR were €25,619 and €35,640. **CONCLUSIONS:** Base-case results show that belimumab is cost-effective from the Spanish societal perspective. From the NHS perspective, the model provides results that fall within an acceptable threshold considering the prevalence and the severity of the disease. These results highlight the importance of adopting a societal perspective, especially in pathologies such as SLE which affect young people of working age.

#### PSY54

##### COST-EFFECTIVENESS ANALYSIS OF MAINTENANCE TREATMENT WITH RITUXIMAB IN PATIENTS WITH FOLLICULAR LYMPHOMA RESPONDING TO FIRST LINE INDUCTION THERAPY IN PORTUGAL

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**OBJECTIVES:** Evaluate the efficiency of rituximab in maintenance treatment of patients with follicular lymphoma (FL) who respond to first line induction with rituximab versus observation in Portugal. **METHODS:** Cost-effectiveness (Life